

In the Claims

Claims are amended as follows:

1. (Currently Amended) A method of operating a connectionless network to provide a priority routing service for traffic between a predetermined network user and a plurality of customers communicating with said user via said network, the network comprising a plurality of network elements and links therebetween, the method comprising:

monitoring said connectionless network to determine an actual, or expected, congestion point;

maintaining an express route for carrying said traffic, the express route comprising one or more said links between two end elements which bypasses said congestion point;

identifying, at one or both said end elements, data packets originating from said user and destined for [[a]] one of said customers or data packets originating from [[a]] one of said customers and destined for said user, and diverting said packets along said express route.

2. (Original) A method as claimed in claim 1 wherein said route is bi-directional, both said end elements being arranged to identify and divert said packets.

3. (Original) A method as claimed in claim 1 wherein said maintaining step comprises reserving bandwidth on said links forming said route.

4. (Original) A method as claimed in claim 1 wherein said route has one end element adjacent or forming the network entry point of said user.

5. (Original) A method as claimed in claim 1 wherein said diverting step comprises

modifying a forwarding table within one said end element such that data packets having a destination address corresponding to said user are diverted along said route.

6. (Original) A method as claimed in claim 1 wherein said diverting step comprises filtering data packets within the other said end element such that data packets having a source address corresponding to said user are diverted along said route.

7. (Previously Presented) A network element for use in a connectionless network comprising a plurality of network elements and links therebetween and an express route for carrying traffic between a predetermined network user and a plurality of customers, the express route comprising one or more links between two end elements which bypasses a congestion point, the network element comprising:

means for routing data packets onto another element dependent on a destination address of said packets and

filter means for identifying and diverting data packets having a source address corresponding to said user, said identified packets being diverted to an element not specified by said routing means and forming part of said express route for said user.

8. (Currently Amended) A connectionless network comprising:

a plurality of network elements and links therebetween;

means for monitoring said connectionless network to determine an actual, or expected, congestion point;

means for maintaining an express route comprising one or more said links between two end elements which bypasses said congestion point;

wherein at least one said end element is arranged to identify data packets originating from a network user and destined for one of a plurality of customers of said user, or data packets originating from ~~a said one of said plurality of~~ customers and destined for said user, and to divert said packets along said express route.

9. (Currently Amended) ~~A method as claimed in claim 1 comprising the step of~~
operating a connectionless network to provide a priority routing service for traffic between a
predetermined network user and a plurality of customers communicating with said user via
said network, the network comprising a plurality of network elements and links
therebetween, the method comprising:

monitoring said connectionless network to determine an actual, or expected,
congestion point;

maintaining an express route for carrying said traffic, the express route comprising
one or more said links between two end elements which bypasses said congestion point;

identifying, at one or both said end elements, data packets originating from said user
and destined for one of said customers or data packets originating from one of said
customers and destined for said user, and diverting said packets along said express route;
and

identifying elements of the network where traffic between said user and one or more
of said customers is concentrated and selecting one of the identified elements where traffic
is concentrated as one of said end elements of the express route.

10. (New) A connectionless network comprising:
a plurality of network elements and links therebetween;

means for monitoring said connectionless network to determine an actual, or expected, congestion point;

means for maintaining an express route comprising one or more said links between two end elements which bypasses said congestion point;

wherein at least one said end element is arranged to identify data packets originating from a network user and destined for one of a plurality of customers of said user, or data packets originating from one of said plurality of customers and destined for said user, and to divert said packets along said express route; and

means for identifying elements of the network where traffic between said user and one or more of said customers is concentrated and for selecting one of the identified elements when traffic is concentrated as one of said end elements of the express route.

11. (New) A method according to claim 1 wherein said data packets are identified in dependence on both their source and destination addresses.

12. (New) A connectionless network according to claim 8 wherein said data packets are identified in dependence on both their source and destination addresses.